

REMARKS

Reconsideration and allowance of the present patent application based on the following remarks are respectfully requested.

By this Amendment, claims 1, 7, 11 and 12 are amended. Support for the amendments to the claims can be found throughout the original description. No new matter has been added. After entry of this Amendment, claims 1-12 will be pending in the patent application.

Entry of this Amendment is proper under 37 C.F.R. §1.116 as the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not present any new issues that would require further consideration and/or search as the amendments merely amplify issues discussed throughout the prosecution; (c) do not present any additional claims without canceling a corresponding number of claims; and (d) place the application in better form for appeal, should an appeal be necessary. Entry of this Amendment is thus respectfully requested.

Claims 1-5, 11 and 12 were rejected under 35 U.S.C. § 103(a) based on Norton *et al.* (U.S. Patent No. 4,808,115) (hereinafter “Norton”) in view of Olsson (U.S. Patent No. 5,949,300) and Fayfield (U.S. Patent No. 5,644,730). The rejection is respectfully traversed.

Claim 1 recites a network bus coupler mountable on a circuit card, the network bus coupler comprising, *inter alia*, “connectors disposed exterior of the housing and extending outwardly from the housing, the connectors being electrically coupled to the electrical isolation circuitry and configured to engage at least some sockets of the circuit card, wherein the network bus coupler is configured to couple a bus to a device connected to the circuit card, the bus and the circuit card disposed exterior of the housing, and wherein a first plurality of said connectors extending outwardly from the housing is configured to be coupled to the bus via the circuit card and a second plurality of said connectors extending outwardly from the housing is configured to be coupled to the device via the circuit card.” The combination of Norton, Olsson and Fayfield do not disclose, teach or suggest these aspects of claim 1.

By way of review, the cited portions of Norton disclose a line replaceable module 12 (LRM) (identified by the Office Action as the “network bus coupler” of claim 1) having connectors 16, 50 (identified as the “connectors” of claim 1) that engage a connector assembly 160 mounted within a black box. *See* Norton at FIG. 3 and col. 9, lines 5-6. The LRM 12 includes circuit cards 38, 40 (identified as the “circuit card” of claim 1).

The Office relies on element 12 of Norton as allegedly disclosing, teaching or suggesting the housing of claim 1. *See* Office Action at page 2. The Office Action further relies on elements 16, 18 and 50 of Norton as allegedly disclosing, teaching or suggesting the connectors of claim 1. *See* Office Action at page 2. The Office also relies on elements 38, 40 of Norton as allegedly disclosing, teaching or suggesting the circuit card of claim 1. *See* Office Action at page 2. However, according to claim 1, the circuit card is disposed exterior of the housing. This is in striking contrast with the circuit cards 38, 40 of Norton which are disposed inside the housing 12. Further, unlike claim 1, connectors 16 of Norton do not include a first plurality of connectors extending outwardly from the LRM 12 configured to be coupled to a bus via the circuit card and a second plurality of connectors extending outwardly from the LRM 12 configured to be coupled to the device via the circuit card.

The cited portions of Olsson and Fayfield fail to remedy the deficiencies of Norton. The cited portions of Olsson disclose a line coupler having a bus line piece, at least one transformer, two electrically shielded housings and a coupling site. *See* Olsson at col. 2, lines 1-8. The cited portions of Fayfield disclose a dual mode binary sensor for bus operation. *See* Fayfield at FIG. 4. With this said, the cited portions of Olsson and Fayfield do not disclose, teach or suggest a network bus coupler wherein a bus and a circuit card are disposed exterior of the housing, and wherein a first plurality of the connectors extending outwardly from the housing is configured to be coupled to the bus via the circuit card and a second plurality of said connectors extending outwardly from the housing is configured to be coupled to the device via the circuit card. Therefore, any proper combination of the cited portions of Norton, Olsson and Fayfield cannot result, in any way, in the invention of claim 1.

Claims 2-5 are patentable over the cited portions of Norton, Olsson, Fayfield and any combination thereof at least by virtue of their dependency from claim 1 and for the additional features recited therein.

Claim 11 is patentable over the cited portions of Norton, Olsson, Fayfield and any combination thereof for at least similar reasons as provided above for claim 1 and for the features recited therein. Claim 11 recites a network bus coupler mountable on a circuit card, the network bus coupler comprising “connectors disposed exterior of the housing and extending outwardly from the housing, the connectors being electrically coupled to the electrical isolation circuitry and configured to engage at least some sockets of the circuit card, wherein the network bus coupler is configured to couple a bus to a device connected to the circuit card, the bus and the circuit card disposed exterior of the housing, and wherein a first plurality of said connectors extending outwardly from the housing is configured to be

coupled to the bus via the circuit card and a second plurality of said connectors extending outwardly from the housing is configured to be coupled to the device via the circuit card.”

Claim 12 is patentable over the cited portions of Norton, Olsson, Fayfield and any combination thereof for at least similar reasons as provided above for claim 1 and for the features recited therein. Claim 12 recites a network bus coupler mountable on a circuit card, the network bus coupler consisting essentially of, *inter alia*, “connectors disposed exterior of the housing and extending outwardly from the housing, the connectors being electrically coupled to the electrical isolation circuitry and configured to engage at least some sockets of the circuit card, wherein the network bus coupler is configured to couple a bus to a device connected to the circuit card, the bus and the circuit card disposed exterior of the housing, and wherein a first plurality of said connectors extending outwardly from the housing is configured to be coupled to the bus via the circuit card and a second plurality of said connectors extending outwardly from the housing is configured to be coupled to the device via the circuit card.” The cited portions of Norton, Olsson, and Fayfield do not disclose, teach or suggest these features.

Accordingly, reconsideration and withdrawal of the rejection of claims 1-5, 11 and 12 under 35 U.S.C. § 103(a) based on Norton in view of Olsson and Fayfield are respectfully requested.

Claim 12 was rejected under 35 U.S.C. § 103(a) based on Brodsky (U.S. Patent No. 4,833,600) in view of Olsson. The rejection is respectfully traversed.

Claim 12 is discussed above. The cited portions of Brodsky disclose an integrated circuit U3 interfaced with a common network line 20 through an INCOM coupling circuit 22. *See* Brodsky at col. 5, lines 43-46 and FIGS. 1 and 2. With this said, the cited portions of Brodsky do not disclose, teach or suggest a network bus coupler consisting essentially of, *inter alia*, “a housing configured to house essentially an electrical isolation circuitry; and, connectors disposed exterior of the housing and extending outwardly from the housing, the connectors being electrically coupled to the electrical isolation circuitry and configured to engage at least some sockets of the circuit card, ...wherein a first plurality of said connectors extending outwardly from the housing is configured to be coupled to the bus via the circuit card and a second plurality of said connectors extending outwardly from the housing is configured to be coupled to the device via the circuit card.”

The cited portions of Olsson fail to remedy the deficiencies of Brodsky. As noted previously, the cited portions of Olsson do not disclose, teach or suggest the above identified

features of claim 12. Therefore, any proper combination of the cited portions of Brodsky and Olsson cannot result, in any way, in the invention of claim 12.

Accordingly, reconsideration and withdrawal of the rejection of claim 12 under 35 U.S.C. § 103(a) based on Brodsky are respectfully requested.

Claims 7, 8 and 10 were rejected under 35 U.S.C. § 103(a) based on Norton in view of Olsson. The rejection is respectfully traversed.

Claim 7 recites a system for coupling a device to a bus, said system comprising, *inter alia*, “a modular network bus coupler mountable to said circuit card and configured to couple the bus to the device connected to the circuit card, said bus coupler comprising: a housing; electrical isolation circuitry disposed within the housing; and, a plurality of pins disposed exterior of the housing and extending outwardly from the housing, the plurality of pins being engageable with at least some of said sockets of said circuit card, at least some of said pins being electrically coupled to said electrical isolation circuitry, wherein the bus and the circuit card are disposed exterior of the housing, and wherein a first plurality of said pins extending outwardly from the housing is configured to be coupled to the bus via the circuit card and a second plurality of said pins extending outwardly from the housing is configured to be coupled to the device via the circuit card.”

As noted previously, the cited portions of Norton and Olsson fail to disclose, teach or suggest these features. Therefore, any proper combination of Norton and Olsson cannot result, in any way, in the invention of claim 7.

Claims 8 and 10 are patentable over the cited portions of Fayfield, Norton, Olsson and any proper combination thereof at least by virtue of their dependency from claim 7 and for the additional features recited therein.

Accordingly, reconsideration and withdrawal of the rejection of claims 7, 8 and 10 under 35 U.S.C. § 103(a) based on Norton in view of Olsson are respectfully requested.

Claims 6 and 9 were rejected under 35 U.S.C. § 103(a) based on Norton in view of Olsson, Fayfield and Shaffer (U.S. Patent No. 5,841,778). The rejection is respectfully traversed.

Claim 6 is patentable over the cited portions of Norton, Olsson, Fayfield and any combination thereof at least by virtue of its dependency from claim 1 and for the additional features recited therein. Similarly, claim 9 is patentable over the cited portions of Norton, Olsson, Fayfield and any combination thereof at least by virtue of its dependency from claim 7 and for the additional features recited therein.

As noted in Applicant's last Response, the cited portions of Shaffer fail to remedy the deficiencies of Norton, Olsson and Fayfield. For example, the cited portions of Shaffer fail to disclose, teach or suggest a plurality of pins disposed exterior of the housing and extending outwardly from the housing, the plurality of pins being engageable with at least some of said sockets of said circuit card, at least some of said pins being electrically coupled to said electrical isolation circuitry, wherein the bus and the circuit card are disposed exterior of the housing, and wherein a first plurality of said pins extending outwardly from the housing is configured to be coupled to the bus via the circuit card and a second plurality of said pins extending outwardly from the housing is configured to be coupled to the device via the circuit card, as recited in claims 6 and 9. The cited portions of Shaffer merely relate to a system for controlling traffic on a local area network. Thus, any proper combination of Norton, Olsson and Shaffer cannot result in any way in the invention of claims 6 and 9.

Furthermore, Applicant strenuously disagrees with the Office Action's determination that Shaffer inherently discloses a bus terminator disposed in the housing and electrically coupled to a connection disposed exterior of the housing. "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics necessarily flow from the teachings of the applied prior art." (See MPEP § 2112 citing Ex Parte Levy, 17 U.S.P.Q. 2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)). (Emphasis added). What the cited portions of Shaffer do disclose are two terminators 110, 160 that are located at opposite sides of a network bus 170. (See FIG. 1 of Shaffer). However, there are no teachings or suggestions in the cited portions of Shaffer, nor in any of the cited references, that terminators 110, 160 should be disposed inside of the housing of a network bus coupler and electrically coupled to a connector exterior of the housing.

Accordingly, reconsideration and withdrawal of the rejection of claims 6 and 9 under 35 U.S.C. § 103(a) based on Norton in view of Olsson, Fayfield and Shaffer are respectfully requested.

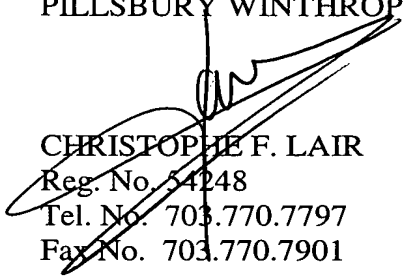
All rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited. If any point remains at issue which the Examiner feels may best be resolved through a personal or telephone interview, please contact the undersigned at the telephone number below.

MCLEOD ET AL. -- 10/522,906
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Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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